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| Subject: Science Year: Phase 1 – Year B Rocks  NC/PoS:   * compare and group together different kinds of rocks on the basis of their appearance and simple physical properties * recognise that soils are made from rocks and organic matter |
| Prior Learning (what pupils already know and can do)  Know the difference between an object and a material. Can classify materials based on their properties and explain why they have been grouped that way. Know rock is a natural material. Know the properties hard/soft and permeable/impermeable. |
| End Goals (what pupils MUST know and remember   * Know that there are different types of rocks and stones. Know that pebbles and stones can have bright patterns and marks. * Know what soil is made up from. Know that soil can help plants grow. * Know what sand is made up of. * Know that some rocks are harder and some are softer such as chalk and charcoal. Compare and group together various kinds of rocks based on their appearance and simple physical properties. |
| Key Vocabulary: rocks, stones, pebbles, materials, property, soil, sample, sand, magnetic, magnet, magnifying glass. |
| Session 1: Recap: Recap materials and their properties.  Children to look at a variety of rocks. Ask the children to sort them into groups. Children to describe how they have sorted the rocks. Recap properties of materials. Can the children sort them into rocks, pebbles and stones? What is the difference between the three?  <https://youtu.be/5b9o7yM7YGE>  Children to set up a compost heap in forest school. Children to know the difference between soil and compost.  Vocabulary: rocks, stones, pebbles, materials |
| Session 2: Recap: What are the properties of a rock?  Children to discover what soil is made of. Children to look a variety of soil samples. Children to recognise that soil is used to help plants grow. Children to investigate the soil samples and what the contents is.  Write a question, write what they did, and write what they found out. Record data in simple prepared tables, pictorially or by taking photographs.  Vocabulary: property, soil, sample |
| Session 3: Recap: What soil is made of.  Children to look closer at sand.  <https://youtu.be/XnxgNgVHej0>  Children to all have their own sand sample to investigate. The children will have access to magnets to remove any iron in the sand. The children will also have magnifying glasses to take a closer look at the sand samples. Children could also look at different types of sand e.g. builder sand, play sand, natural sand from the beach.  Vocabulary: sample, sand, magnetic, magnet, magnifying glass. |
| Session 4: Recap the contents of sand. What is it made of?  Children to learn that some rocks are harder and some are softer such as chalk and charcoal. The children are to compare and group together various kinds of rocks based on their appearance and simple physical properties.  Children to set up an experiment to test the strength of different rocks. Ask a question that is looking for a pattern based on observations. Children will Record data in simple, prepared tables and Know that a test should be repeated a number of times to make sure the result is fair. |
| Link to career: |
| Scientists who have helped develop understanding in this field: Mary Anning <https://www.youtube.com/watch?v=Of5sK8p2rZY> |